Abstract of the Disclosure

An Orthogonal Frequency Division Multiplexing (OFDM) receiver of a wireless Local Area Network (LAN) system uses double cross-correlation and double peak-value comparison for symbol timing synchronization. The OFDM receiver of the wireless LAN system performs first differential cross-correlation using a short training symbol as a reference signal, performs second differential cross-correlation for an output value of the first differential cross-correlation, and performs double peak-value comparison for an output value of the second differential cross-correlation. In this way, fast symbol synchronization is achieved due to an excellent correlation property. Accordingly, a wireless LAN system including the OFDM receiver has a high response speed.